	Water Quality Division Substantive Policy	Page 1 of 4 plus Attachment
	Point-of-Entry and Point-of-Use Treatment Devices	Policy # 3001.2021
		Effective: 8/1/2021

This Substantive Policy statement is advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the Arizona Administrative Procedure Act. If you believe that this substantive policy statement does impose additional requirements or penalties on regulated parties, you may petition the agency under Arizona Revised Statutes section 41-1033 for a review of the statement.

1.0 **Purpose**

This policy establishes the guidance document “Arizona Point-of-Entry and Point-of-Use Treatment Devices Compliance Program Guidance” as the recommended approach to satisfy the rule requirements in A.A.C. R18-4-218 and R18-4-103 (40 CFR 142.62 (h)).

This policy will assist public water systems choosing POE/POU treatment devices as their means of compliance with the level of public health protection required by the Safe Drinking Water Act (SDWA).

2.0 **Definitions**

A.A.C. – Arizona Administrative Code

ADEQ - Arizona Department of Environmental Quality

C.F.R – Code of Federal Regulations

Local Authority (LA) - Local environmental agency or County Health Department in delegated counties. Maricopa County Environmental Services Department (MCESD) and Pima County Department of Environmental Quality (PDEQ) are local authorities that oversee this process in Maricopa and Pima Counties, respectively.

MCL – Maximum Contaminant Level, which is the highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

Point-of-Entry treatment device (POE) - a treatment device typically installed after the water meter and that treats all potable water entering a building.

Point-of-Use treatment device (POU) - a treatment device typically installed at a single water tap/faucet such as the kitchen sink and that will treat only the water intended for direct consumption at that tap/faucet.

Safe Drinking Water Act – a federal law that protects public drinking water supplies throughout the nation. Under the SDWA, the Environmental Protection Agency sets standards for drinking water quality and oversees various technical and financial programs to ensure drinking water safety.

3.0 Policy Statement

3.1 The guidance document “Arizona Point-of-Entry and Point-of-Use Treatment Devices Compliance Program Guidance” is ADEQ’s approach to satisfy the rule requirements in A.A.C. R18-4-218 and R18-4-103 (40 CFR 142.62 (h)).

3.2 Per A.A.C. R18-4-218(B)(3), a POE/POU treatment device must be independently certified as conforming to an applicable American National Standards Institute (ANSI) / National Sanitation Foundation (NSF) standard, if one exists. The water system must provide a manufacturer's certification showing the treatment device is effective in reducing the specific contaminant(s) of concern.

3.3 A public water system must obtain ADEQ or LA approval of the design of the POE/POU program pursuant to A.A.C. Title 18, Chapter 5, Article 5. The water system must obtain from ADEQ or LA:

- An Approval to Construct, pursuant to A.A.C. R18-5-505, with applicable fee
 - For ADEQ regulated systems, the current fee schedule can be found at A.A.C. R18-14-202, Table 1. For systems regulated by MCESD or PDEQ, refer to the specific County’s schedule as the fees may differ.
 - As of the date of this Substantive Policy Statement, for ADEQ regulated systems, the applicable fee is \$1,500 because a POE/POU treatment device is a Water Treatment Plant < 0.1 million gallons per day.
- An Approval of Construction, pursuant to A.A.C. R18-5-507

3.4 Consistent with A.A.C. R18-4-218(C)(3), the water system must demonstrate it has taken actions to ensure that all buildings connected to the system will have sufficient POE/POU devices such that 100% of residents, employees and customers will be protected by having access to potable water.

3.5 POU/POE treatment devices are not considered structural revisions, additions, extensions, or modifications and, therefore, are not eligible for an exemption from plan review requirements under A.A.C. R18-5-505 (B)(3).

4.0 Audience

General Public

Public Water System Owners and Operators

Engineers/Consultants

Delegated Counties

ADEQ Drinking Water Value Stream

5.0 Policy Steward (Position Responsible for Implementing & Maintaining the Policy – Title/Unit/Section/Division)

Manager, Drinking Water Programs Unit, Drinking Water Section, Water Quality Division

6.0 Communication & Training

This policy will be noticed in accordance with A.R.S. § 41-1091 and 41-1013(9). This policy will be provided to delegated counties, posted on the ADEQ website and updated as needed. Training will be provided to ADEQ and delegated counties' staff.




7.0 Review, Audit & Revision Schedule

This policy is a revision of the 2005 Public water system Point-of-Use Compliance Program Manual. The 2020 revision will supersede the 2005 guidance document. This policy will be reviewed every two years.

8.0 Additional Documentation Templates and Checklists

Attachment A – Arizona Point-of-Entry/Point-of-Use Treatment Devices Compliance Program Guidance

9.0 **Approved by:**

Title	Name	Signature	Date
ADEQ Director	Misael Cabrera		May 19, 2021
ADEQ Water Quality Division Director	Trevor Baggione	 <small>Trevor Baggione (Apr 23, 2021 15:45 PDT)</small>	Apr 23, 2021
Administrative Counsel as to form	Edwin Slade	 <small>Edwin Slade (Apr 9, 2021 09:03 PDT)</small>	Apr 9, 2021

10.0 **Historical Note**

Date	Number, Name and Issue Date of Previous Version	Replaces Listed Sections/Entire Document	Reason
TBD	Policy No. 3009-000 Public water system Point-of-Use Compliance Program Manual June 26, 2005	Replaces entire document	Changes in ADEQ's interpretation of rules related to POE/POU treatment devices

ARIZONA POINT-OF-ENTRY AND POINT-OF-USE TREATMENT DEVICES COMPLIANCE PROGRAM GUIDANCE



June 2021

This substantive policy statement is advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the Arizona administrative procedure act. If you believe that this substantive policy statement does impose additional requirements or penalties on regulated parties you may petition the agency under section 41-1033, Arizona Revised Statutes, for a review of the statement.

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I. INTRODUCTION

Arizona Department of Environmental Quality's drinking water rules allow public water systems to employ Point-of-Entry (POE) and Point-of-Use (POU) treatment devices as a means for compliance with drinking water Maximum Contaminant Levels (MCLs). This guidance document is ADEQ's recommended approach to satisfy the rule requirements in A.A.C. R18-4-218 and R18-4-103 (40 CFR 142.62 (h)). It is designed to:

- Provide an overview of the POE/POU compliance program including the minimum criteria and procedures established by the Arizona Administrative Code (A.A.C) R18-4-218 and R18-4-103 (40 Code of Federal Regulations (CFR) 142.62(h)); and
- Assist Public Water Systems (PWSs) with determining the feasibility of using POE/POU devices as their means of compliance with the level of public health protection required in the Safe Drinking Water Act (SDWA).

ADEQ regulated systems will follow the process outlined in this guidance. Specific processes for public water systems regulated by local authorities (LA¹) may differ. Contact LAs if you have specific questions.

II. POE/POU PROGRAM OVERVIEW

The POE/POU program differs fundamentally from a centralized treatment program which is designed to ensure all of the water delivered by the public water system meets SDWA rules and regulations.

Under the POE/POU program, the water system is required to install a POE/POU device that will treat only the water intended for direct consumption. A POU device is typically installed at a single tap such as the kitchen sink, as seen in Diagram 1 from the U.S. Environmental Protection Agency (EPA). A POE device is typically installed after the water meter and treats the water entering the house/building, as seen in Diagram 2 from the EPA.

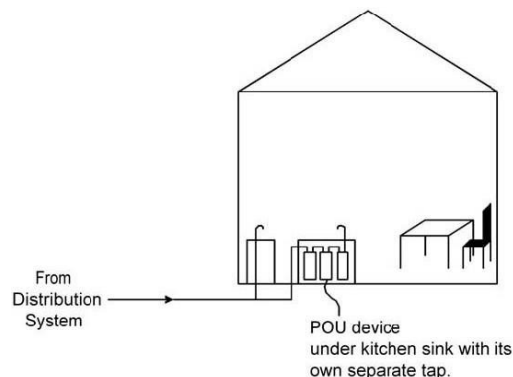


Diagram 1. Typical POU device installation

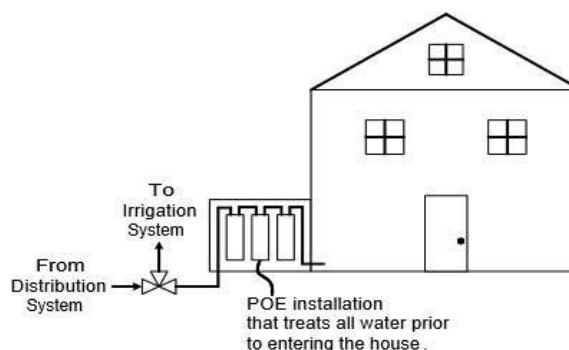


Diagram 2. Typical POE device installation

¹ Local Authority (LA) - Local environmental agency or County Health Department in delegated counties. Maricopa County Environmental Services Department (MCESD) and Pima County Department of Environmental Quality (PDEQ) are local authorities that oversee this process in Maricopa and Pima Counties, respectively.

Any water system choosing to use POE/POU devices as a means to comply with an established drinking water MCL will be required to meet all applicable state and federal laws and regulations.

ADEQ requires that:

- a POE/POU device not be used to comply with an MCL or treatment technique requirement for a microbial contaminant, pursuant to R18-4-218(B)(1);
- a POE/POU device be listed in 40 CFR §141 as an acceptable compliance technology for the applicable contaminant, pursuant to R18-4-218(B)(2);
- a POE/POU device be independently certified as conforming to an applicable American National Standards Institute (ANSI) / National Sanitation Foundation (NSF) standard, if one exists, pursuant to R18-4-218(B)(3);
- a POE/POU device be owned, controlled, and maintained by the public water system or maintained by a person under contract with the public water system to ensure proper operation and maintenance and compliance with an MCL, pursuant to R18-4-218(B)(4);
- a POE/POU device be equipped with a mechanical warning to ensure that customers are automatically notified of recommended system maintenance and or operational problems, pursuant to R18-4-218(B)(5);
- a water system obtains ADEQ approval of the POE/POU program design pursuant to Title 18, Chapter 5, Article 5 of the A.A.C; and
- a water system obtains ADEQ-approval of an operation and maintenance plan (O&M plan) ensuring proper long-term operation, maintenance, and monitoring of the POE/POU devices, pursuant to R18-4-218(C).

In the required O&M plan, the water system shall demonstrate that:

- the POE/POU device provides health protection equivalent to the health protection provided by centralized water treatment, pursuant to R18-4-218(C)(1);
- the POE/POU device that is installed, operated, maintained, and monitored in a manner that assures continuous compliance with MCLs, treatment techniques, and other requirements, pursuant to R18-4-218(C)(2);
- buildings connected to the system must have a sufficient number of POE/POU devices installed to provide adequate potable water for all residents, employees, and customers, pursuant to 40 CFR 142.62 (h)(6);
- the following minimum rights and responsibilities of persons served by the public water system are conveyed with the title upon the sale of property containing a POE/POU device, pursuant to R18-4-218(C)(4):

- The public water system owns and is responsible for maintaining a POE/POU device that is installed to meet the requirements of A.A.C. R18-4-218;
- Persons served by public water systems must grant reasonable access to POE/POU devices by public water system employees, so that the devices can be properly maintained; and
- Public water systems may discontinue water service to a customer who refuses to allow public water system employees to enter the customer's home or business to inspect and maintain POE/POU devices, pursuant to R18-4-218(C)(4)(b).

III. DETERMINING IF A POE/POU PROGRAM WILL WORK FOR YOUR SYSTEM

When considering a POE/POU program, water systems must fully understand and weigh the obligations that come with implementing such a program. Factors to consider when determining the appropriateness of a POE/POU program for your water system include:

- The number of service connections in your system
- The type of service connections in your system
 - Single family homes
 - Apartments
 - Restaurants
 - Office buildings
 - Medical offices
 - Commercial or Industrial
 - Other
- The cost of centralized versus POE/POU treatment
- The additional sampling required and associated expense
- The ability to gain entrance into your customers' households and businesses
- Coordinating with customers to schedule monitoring and maintenance
- Educating customers on the goals and functions of a POE/POU program

ADEQ will not authorize a system to implement a POE/POU program that does not have a 100% initial water customer participation at the inception of the program. Refer to Section IV. E (page 10) for more detail.

Once a water system has determined that a POE/POU program is appropriate, the next step is to choose between POE devices and POU devices. Factors to consider include:

- Type of service connections and number of taps available for human consumption to determine if the device should treat one tap or the entire building/home. For example, it may be more cost effective for a restaurant to install a POE device that treats all the water entering the restaurant building instead of installing POU devices for all the individual taps (ice machine, soda fountain, hand washing, food preparation, etc.)
- Purchasing, maintenance and sampling costs of POE devices versus POU devices
- Availability of POE devices versus POU devices

- Accessibility of device for maintenance
- Type of contaminant

For case studies and more information on implementation considerations for POE/POU devices, please refer to the *Point-of-Use or Point-of Entry Treatment Options for Small Drinking Water Systems* document prepared by the U.S. Environmental Protection Agency:

https://www.epa.gov/sites/production/files/2015-09/documents/guide_smallsystems_pou-poe_june6-2006.pdf

A. WATER WASTING CONCERNS

When considering POE/POU technologies, many water systems and their customers face concerns about potential water losses related to typical POE/POU devices.

POE/POU devices that use absorption technology use treatment media that chemically filter out contaminants by attracting them to the media. These devices typically do not require backwashing and therefore do not result in water loss.

In contrast, POE/POU Reverse Osmosis (RO) devices typically use two to four gallons of water to produce one gallon of drinking water. The fluctuation in efficiency is due to many factors that continually change within the RO system, including incoming water pressure, backpressure produced by the storage tank and age, and the condition of the RO membrane itself.

Installing POE/POU RO devices can lead to a large amount of wasted water, especially with 100 or more devices. The volume of wasted water can be compared to centralized treatment, which has a backwashing cycle associated with it. It is important to educate your customers about the expected total monthly water usage.

IV. REQUIREMENTS OF A POE/POU PROGRAM

A. POE/POU DEVICE REQUIREMENTS

The SDWA requires that water systems installing a POE/POU device as part of a compliance program must use devices that are independently certified to relevant product standards published by the American National Standards Institute (ANSI) /National Sanitation Foundation (NSF) (referred to as ANSI/NSF standards.), pursuant to 40 CFR 142.62(h)(4).

The following ANSI/NSF standards are commonly used for compliance programs:

- I. NSF Standard 42: Drinking Water Treatment Units – Aesthetic Effects
- II. NSF Standard 44: Cation Exchange Water Softeners
- III. NSF Standard 53: Drinking Water Treatment Units – Health Effects
- IV. NSF Standard 58: Reverse Osmosis Drinking Water Treatment Systems

If a water system plans to install a treatment device covered by one of these standards, the water system must make sure the product selected has been independently certified according to the

ANSI/SNF standards by one of the ANSI-accredited certifiers, shown below. The water system must provide a manufacturer's certification showing the treatment device is effective in reducing the specific contaminant(s) of concern. POE/POU manufacturers are aware of this certification requirement and should be able to readily provide this documentation.

Some ANSI accredited certifiers that maintain databases of devices certified by their organizations include:

- National Sanitation Foundation (NSF) at www.nsf.org/Certified/DWTU
- Water Quality Association (WQA) at <http://www.wqa.org/find-products#>
- Underwriters Laboratories (UL) at <https://productiq.ulprospector.com/en>
- The International Association of Plumbing and Mechanical Officials (IAPMO) at <http://pld.iapmo.org/>
- CSA Group at <https://www.csagroup.org/testing-certification/product-listing/>

Any mention of trade names or commercial products does not constitute State of Arizona endorsement or recommendation for use. Lastly, ADEQ may consider devices that are not ANSI certified, on a case-by-case basis, if the product is certified under the Water Quality Association's "Gold Seal" program.

B. PERFORMANCE INDICATOR DEVICE REQUIREMENTS

Each POE/POU device must be equipped with an automatic mechanical warning system, a Performance Indication Device (PID), which ensures that customers are automatically alerted of recommended system maintenance and or operational problems. The PID should provide some kind of automatic visual or auditory alert in such instances. To allow the water system sufficient time to perform maintenance, the PID should be calibrated to signal the customer before the POE/POU device reaches its exhaustion stage. The PID may not automatically shut off the POE/POU device. An automatic shutoff can result in the customer by-passing the unit and receiving untreated water directly from the tap.

C. CUSTOMER PARTICIPATION REQUIREMENTS

Customer participation most likely represents the largest challenge to water systems selecting a POE/POU compliance program. To provide water to a building or connection, the water system must be permitted to enter the household or place of business of each customer to install, sample and maintain the POE/POU device.

A well planned and comprehensive customer education program will likely serve to assist water systems in obtaining acceptance from all customers.

The SDWA establishes water quality standards that must be met for all customers. If a customer refuses to allow POE/POU installation, maintenance, or monitoring, that customer will not receive the same protection as those who have allowed POE/POU installation. In these instances, the water system must demonstrate it has taken actions to ensure that all buildings connected to the system

will have sufficient POE/POU devices such that 100% of residents, employees and customers will be protected. These actions are discussed further in Section IV. E (page 10).

D. MONITORING REQUIREMENTS

It is required for the water system to sample the water from each POE/POU device over a specified period of time to ensure the device is working properly. The water system will be required to develop a sampling plan as part of its O&M plan and include it in its approval to construct application. The sampling plan will include²:

1. Number of devices
2. System map identifying POE/POU location(s)
3. Sampling schedule including test method

1. NUMBER OF DEVICES

The system should include a list of the projected number of POE/POU devices to be installed. Each device should have an identification number (i.e. POU1, POU2 ...) and a sample location. Changes to the number and location of POE/POU devices should be communicated to ADEQ.

2. SYSTEM MAP IDENTIFYING POE/POU LOCATION

The system should include a map identifying each POE/POU device by the unique identification number. The map should be representative of the water system and include major system components.

3. SAMPLING SCHEDULE INCLUDING ANALYSIS METHOD

a. Acute contaminants

Acute contaminants are those that have health effects that occur within hours or days of exposure. These include nitrates and nitrites. The water system will be required to collect a sample from each device annually with results analyzed by a certified laboratory.

b. Chronic contaminants

Chronic contaminants, by contrast, generally require exposure above the MCL for many years to cause harm. They include many man-made chemicals, some naturally occurring minerals (e.g. arsenic or fluoride), and radiological contaminants.

The water system will be required to collect a sample from each device annually, with 1/3 of the samples analyzed by a certified laboratory and the remaining 2/3 analyzed with an approved field test indicator. An approved field test indicator should detect the contaminant in the appropriate range for the MCL and be calibrated according to the manufacturer's recommendations (if required). If a field test indicator is not available, ADEQ may approve testing a surrogate contaminant under applicable ANSI/NSF standards. Each device will be sampled on a rotating basis such that each device would have been sampled once through a certified laboratory and two times

² Pursuant A.A.C R18-4-218 (C)

with field test indicator at the end of a 3-year compliance cycle. The following schematic illustrates this sampling procedure:

3-year Compliance Cycle		
1st year Compliance Period	2nd year Compliance Period	3rd year Compliance Period
Sample 1/3 (Laboratory)	Sample 1/3 (Laboratory)	Sample 1/3 (Laboratory)
Sample 2/3 (field test indicator)	Sample 2/3 (field test indicator)	Sample 2/3 (field test indicator)

Note: All results analyzed by certified laboratories are required to be submitted to ADEQ on approved reporting forms³. All results analyzed by test strips need to be kept on site. If results exceed an MCL, additional sampling may be required.

In addition to sampling requirements, it is recommended that systems inform ADEQ annually of the number of active POE/POU devices. The annual report form, found in Appendix 4, can be used to update the number of active POE/POU devices.

E. MANAGEMENT OF A POE/POU COMPLIANCE PROGRAM

The management of a POE/POU program will be significantly different than the management of a centralized treatment plant. The majority of work for the former will focus on administrative activities and monitoring. Systems considering a POE/POU compliance program should evaluate the management factors associated with the program including:

- The willingness of your customers to accept a POE/POU compliance program
- The ability of the water system to gain authority to make participation in the program a condition of service
- The maintenance frequency and associated workload
- The record keeping requirements
- Maintaining a log of installed devices
- Tracking the life of the components
- Maintaining sampling records for each device
- Planning and executing component change-out
- Any liability associated with such a program

1. INFORMATION ABOUT LEGAL RESPONSIBILITIES

A water system must determine what resources it has to achieve 100% customer participation. The system must obtain legal authority to require installation as a condition of water service, to obtain access to maintain POE/POU devices and to ensure that certain rights and responsibilities are conveyed with the title upon the sale of the property (i.e. “run with the land”). There are various ways for the water system to obtain these authorities including ordinances, bylaws and Covenants, Conditions and Restrictions (CC&Rs).

³ Pursuant to A.A.C. R18-4-106 (B)

a. Legal authority to make installation, maintenance and monitoring of a POE/POU device conditions of water service

A system may consider whether it has the authority to shut off a customer's water service due to failure to accept a POE/POU device or provide access to maintain and monitor the device, similar to the authority to shut off a customer's water for non-payment.

ADEQ cannot provide advice regarding a system's authority to require POE/POU installation or to terminate service based upon a customer's failure to allow POE/POU installation. The Arizona Corporation Commission (ACC) has an established procedure for providing notice of termination of service to a customer that may be useful as guidance for non-ACC regulated systems (A.A.C. R14-2-410 (b) and (c)).

b. Obtaining legal authority to make installation of a POE/POU device available upon a transfer of ownership (real estate transactions)

A water system that owns a POE/POU device must ensure that certain rights and responsibilities are conveyed with the title upon the sale of the property (i.e. "run with the land"), so that the water system may properly maintain and monitor the POE/POU device as long as it serves the property.

To be permanent and binding, a water system may want to obtain a written easement from the property owner and possibly either contract with the property owner for a restrictive covenant or otherwise ensure that a subdivision modifies its CC&Rs to contain covenants and restrictions to allow the water system access. A properly drafted and executed legal instrument (including recordation, if necessary) should ensure that a water system will be granted access to enter the property to install, maintain, and monitor the POE/POU device per ADEQ and SDWA requirements in perpetuity. ADEQ recommends consulting an attorney familiar with Arizona property law to ensure that this requirement per R18-4-103 & -218 is met.

c. Existing POE/POU devices installed prior to program approval

In the event a water customer already has a water treatment device in their residence or business:

The water system should verify that the customer's device meets all ADEQ and SDWA requirements, including:

- The customer's device is certified by an accredited organization for the reduction of the contaminant of concern;
- The customer's device is fitted with a performance indication device that meets the requirements for the POE/POU program;

- The customer's device adequately treats contaminant(s) of concern or can be reasonably retrofitted. If the customer's device does not adequately treat the contaminant(s) of concern, and cannot be retrofitted, the water system will inform the customer and install and maintain a new POE/POU device.

AND

The water system must:

- Obtain ownership and control of the POE/POU device;
- Become responsible for the proper operation and maintenance of the POE/POU device.

2. POE/POU RECORD KEEPING REQUIREMENTS

The water systems must maintain records for 3 - 10 years, depending on the type of record (A.A.C. R18-4-106 (40 C.F.R. § 141.33)). These records must be available during inspection of the water system pursuant to A.R.S. § 41-1009:

- POE/POU operation and maintenance records
- Annual field test indicator results
- Certified laboratory results

F. APPLICATION REQUIREMENTS

1. APPLICATION FOR POE/POU PROGRAM APPROVAL

Water systems seeking approval of a POE/POU program must complete an application packet and submit it to ADEQ for approval. This packet must include all of the following information:

- a. ADEQ POE/POU program application form
- b. Design report and construction plan (description of the project location, concentration of the contaminant, reduction after using POE/POU treatment device(s), water demand, and design flow).
- c. Manufacturer certification of effectiveness document (Product NSF Certification stamp and related documents, agency providing NSF certification, Manufacturer's O&M...)
- d. Operations and Maintenance plan
- e. Sampling plan
- f. Description of customer education and outreach effort
- g. Applicable fee

ADEQ recommends using the templates provided in the appendices. However, the system can use their own forms to meet the requirements stated above.

2. POE/POU PROGRAM OPERATION AND MAINTENANCE REQUIREMENTS

It is the responsibility of the water system to maintain and service each POE/POU device. The water system may not allow individual homeowners to perform maintenance on the units unless that individual is identified as a qualified person in the program application. Device maintenance should be performed in accordance with the manufacturer's specifications. Failure to follow these specifications may lead to noncompliance under the SDWA.

3. POE/POU DEVICES AND SYSTEM GRADING

Implementing a POE/POU program may change a system's treatment grade. Systems installing POE/POU treatment will be required to have an operator with the appropriate grade of Water Treatment Certification as outlined in A.A.C. R18-5-115.

4. POE/POU PROGRAM INSTALLATION REQUIREMENTS

ADEQ must approve a water system's application prior to installation of POE/POU devices. Proper installation of the POE/POU devices, in the correct location, is critical if the water system is to meet compliance requirements. The water system will be responsible for the installation of the individual devices. Only qualified individuals will be permitted to install the devices under the ADEQ approved program. The water system must ensure individual homeowners and other users do not modify or alter the system after the installation. Examples of qualified people include licensed plumbers and manufacturer or vendor representatives. Special installations (such as routing treated water to ice makers or additional faucets) must be performed by the water system.

APPENDICES

APPENDIX 1 - ATC/AOC Application Checklist

APPENDIX 2 – ATC Application

APPENDIX 3 – Design Report and Construction Plan

APPENDIX 4 - Operations and Maintenance Plan Template

APPENDIX 5 – Sampling Plan Template

APPENDIX 6 – AOC Application

APPENDIX 7 – Annual Update Form

APPENDIX 1 – ATC/AOC Application Checklist

Public Water Systems wanting to use a POE/POU program must apply for and obtain from ADEQ:

- An Approval to Construct, and
- An Approval of Construction

Appendix 1 is a checklist that has all the components needed for complete ATC and AOC applications.

Approval to Construct Point-of-Use /Point-of-Entry (POU/POE) Application Checklist

- ☐ Approval to Construct (ATC) POU/POE Water Treatment Application (Appendix 2)
- ☐ Design report and Construction plan (Appendix 3)
- ☐ Manufacturer Certification of Effectiveness Document (Example: Product NSF Certification stamp and related documents, agency providing NSF certification, Manufacturer's O&M manual, etc.)
- ☐ Operations and Maintenance plan (attached in Appendix 4)
- ☐ Sampling Plan (Appendix 5)
- ☐ Description of Customer Education and Outreach Efforts (Example: meetings, educational pamphlets, etc.)
- ☐ Applicable fee

Approval of Construct Point-of-Use /Point-of-Entry (POU/POE) Application Checklist

- ☐ POE/POU Program AOC Application Form (Appendix 6)

APPENDIX 2

Approval to Construct (ATC) Point-of-Use / Point-of-Entry (POU/POE) Water Treatment Application



APPROVAL TO CONSTRUCT POINT-OF-USE / POINT-OF-ENTRY WATER TREATMENT APPLICATION

GENERAL INFORMATION

GENERAL APPLICATION PROCESS

1. Submit all documents identified in the Application Checklist below. Please see the document entitled Application Submittal locations to determine where to submit your application (ADEQ or County, as applicable). https://static.azdeq.gov/er/dw_delegation_agencies.pdf
2. Satisfy any deficiency requests arising from the Department's pre-installation review of the submitted information.
3. Receive a Certificate of "Approval to Construct" (ATC) from the Department authorizing installation of the Point-of-Use/Entry system. The installation of the project cannot begin until the ATC is issued.
4. For additional guidance on this application process, please reference to the Arizona Point of Use Compliance Program Guidance <http://static.azdeq.gov/forms/pointofuse.pdf>

Fee Category (See Table 1. Design Review Service Fees in A.A.C R18-14-202)	Fee
Water Treatment Plants	
o < 0.1 Million gallons per day (MGD)	\$1,500
o ≥ 0.1 MGD and < 1.0 MGD	\$2,000
o ≥ 1.0 MGD and < 5.0 MGD	\$3,000
o ≥ 5.0 MGD	\$5,000

APPLICATION CHECKLIST

Document Description	
<input type="checkbox"/>	Application
<input type="checkbox"/>	Design Report and Construction Plan
<input type="checkbox"/>	Manufacturer Certification of Effectiveness Document
<input type="checkbox"/>	Operation and Maintenance Plan
<input type="checkbox"/>	Sampling Plan
<input type="checkbox"/>	Description of Customer Education and Outreach Effort
<input type="checkbox"/>	Application Fee

INSTRUCTIONS FOR THE COMPLETION OF THE APPLICATION

Please fill out and submit this Application to obtain authorization to install and operate a point of use/entry system in accordance with Arizona Administrative Code (A.A.C.) R18-4-218.

NAMING THE PROJECT (SECTION 1)

Name the project according to one of the following guidelines. If the project:

1. serves a specific subdivision, assign the same name "XXX Subdivision;"
2. Serves a specific facility, use "XXX RV Park" or "...XXX Campground" or "....XXX Shopping Center;"

APPLICANT INFORMATION (SECTION 2)

The Applicant is the person seeking the approval to install and is the responsible party for the drinking water system. The applicant is the person to whom the certificate will be issued. In addition, the Applicant must:

1. Meet the definition of a "person" in accordance with R18-9-101(29) and A.R.S. 49-201 (26);
2. Be the owner and/or the operator of the drinking water system.
3. Corporations, Limited Liability Companies and Partnerships must be registered with the Arizona Corporation Commission;
4. Sign the Application for Approval to Install (Section 5) certifying that the applicant agrees to comply with the requirements of the rule (A.A.C.), the POU Guidance document, and the terms of the permit.

CONTACT PERSON (SECTION 3)

The Contact Person is the person who acts on the behalf of the applicant to resolve application related issues and receives correspondence during the application process. The Applicant is the person who executes the necessary legal arrangements for the Contact Person to act on the Applicant's behalf.

SITE INFORMATION (SECTION 4)

Please include the requested cadastral information so the location may be located appropriately.

PUBLIC WATER SYSTEM NAME AND ID (SECTION 5)

Please provide the water system name and ID.

COMPONENT INFORMATION (SECTION 6)

Please provide all requested information and attach supplemental information required for review. If requested information is not included, the application may be rejected or if the application is accepted, the review time will take longer as the missing information will be requested before a substantive review may begin.

APPLICANT CERTIFICATION (SECTION 7)

This certification must be signed by the Applicant listed in Section 2. Signing the application certifies all information provided is true and accurate and that the applicant agrees to comply with the requirements of the rule (A.A.C.), and the terms of the permit.



APPROVAL TO CONSTRUCT POINT-OF-USE / POINT-OF-ENTRY WATER TREATMENT APPLICATION

1. Project Name (See instructions for naming criteria)		
Project Name: _____		
2. Applicant/Owner		
(Check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Contractor <input type="checkbox"/> Other: _____		
Name: _____		
Title: _____		Firm Name: _____
Phone: _____		Email: _____
Mailing Address: _____		City: _____
State: _____		Zip: _____
3. Contact Person/Agent (Please fill out if different than the Applicant)		
(Check all that apply) <input type="checkbox"/> Engineer <input type="checkbox"/> Contractor <input type="checkbox"/> Other: _____		
Name: _____		
Title: _____		Firm Name: _____
Phone: _____		Email: _____
Mailing Address: _____		City: _____ State: _____ Zip: _____
4. Site Information		
County: Choose an item.		City: _____
Location of the point of use system proposed herein:		
Township: _____		Range: _____ Section: _____
Latitude: _____		Longitude: _____
Project Location Description: _____		
5. Public Water System (PWS) Name and ID		
PWS Name: _____		PWS ID: _____
Department Use Only		Date Stamp
File Number		
LTF Number		
Fee Paid		

POINT OF ENTRY /POINT OF USE INFORMATION

6. Selected Components Included (Check all components that are being applied for)

- A) Number of Service Connections: _____
- B) Please indicate contaminant:
- ☐ Arsenic
 - ☐ Nitrate
 - ☐ Fluoride
 - ☐ Radium
 - ☐ Other: _____
- C) Please indicate who is installing the units: _____
- D) Please indicate the type of the performance indication device:
- ☐ TDS Monitor (for RO Units)
 - ☐ Timer
 - ☐ Other: _____
- E) Please indicate if the devices are ANSI/NSF certified:
- ☐ Yes (Include Certification Reports)
 - ☐ No (explain below)

7. Certification Statement (To be completed/signed by the Applicant in Section 2)

I, _____, certify that this application for Approval to Install and all attachments were prepared under my direction or authorization and all information is, to the best of my knowledge, true, accurate and complete. I also certify that the point-of-use/ point of entry system described in this form is or will be designed, constructed, and operated in A.A.C. R18-4-218. I am aware that there are significant penalties for submitting false information including permit revocation as well as the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

APPENDIX 3

Design report and Construction plan



Design Report Template

Point-of-Use/Point-of-Entry Treatment Devices

1. General Information

Public Water System (PWS) Name: Enter public water system name

PWS ID: Enter text.

PWS Type: Choose an item

Population: Enter text.

PWS Physical Address: Enter public water system address

PWS County: Select County

Is the public water system a seasonal system (i.e. only open during certain seasons/months)?

☐ Yes ☐ No

If yes, please explain seasonality and start-up procedures.

Click or tap here to enter text.

2. Contaminant of Concern

The contaminant of concern is Choose an item.

If other, please specify contaminant here: _____

The contaminant of concern is at _____ mg/L at the Entry Point to the Distribution System (EPDS).

The contaminant of concern is at _____ mg/L at the source.

3. Point-of-Entry (POE)/Point-of-Use(POU) Information

The PWS has serves _____ buildings.

Please explain how many faucets/spigots or taps each building has and how many devices will be installed and where.

Example: Building #1 has 4 bathroom sinks, 1 kitchen sink, 2 showers, 1 utility sink, 1 refrigerator with an ice maker. Building #1 will install 1 POU device in the kitchen that will serve the kitchen sink and the ice maker.

Manufacturer's name and brand: _____

The device can handle _____ gallons per minute (gpm).

Type of Point-of-Entry / Point-of-Use Technology used:

- ☐ Adsorptive media
- ☐ Ion exchange (IX)
- ☐ Granular Activate Carbon (GAC)
- ☐ Reverse Osmosis (RO)
- ☐ Other _____

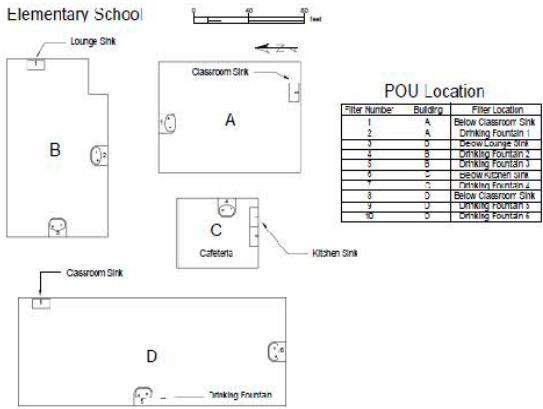
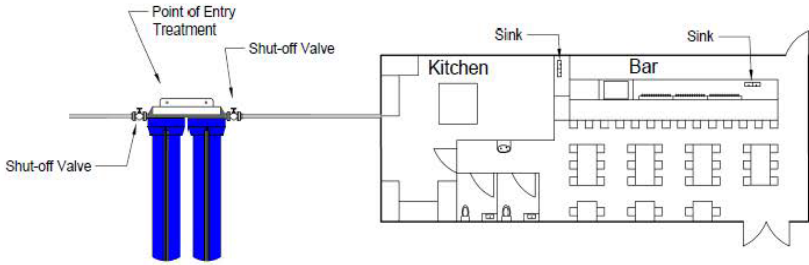
The POE/POU is certified by Choose an item.

4. System maps

Attach a vicinity map (can be a google map)

Attach a construction plan (see example below)

Construction Plans



APPENDIX 4

Operations and Maintenance Plan Template



Part 1: General Public Water System (PWS) Information

PWS Name:

PWS ID#:

PWS Mailing Address:

Contact Person:

Phone#:

Email Address:

PWS Type (Select one): ☐ CWS ☐ NTNCWS ☐ TNCWS

Population Served:

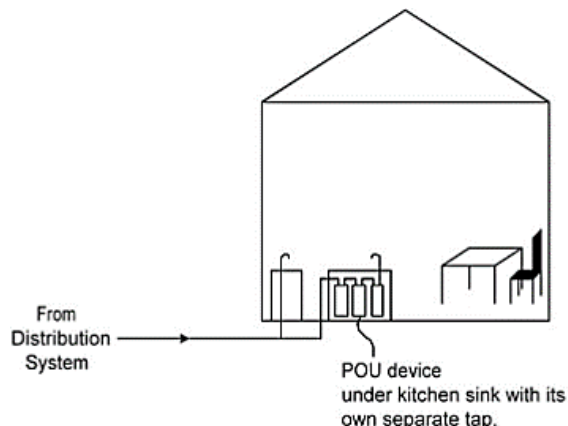
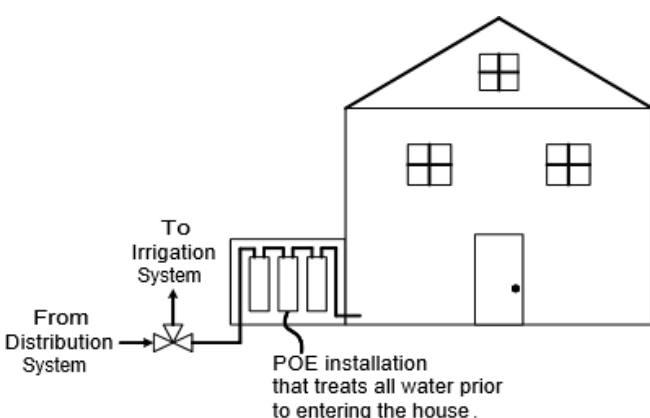
Number of POEs / POU's Approved:

Part 2: Treatment Type

Type of Treatment used:

☐ Point-of-Entry (POE)

☐ Point-of-Use (POU)



Type of Point-of-Entry / Point-of-Use Technology used:

- ☐ Adsorptive media
☐ Ion exchange (IX)
☐ Granular activated carbon (GAC)
☐ Reverse osmosis (RO)
☐ Other _____

Treated analyte: ☐ Arsenic ☐ Nitrate ☐ Radium ☐ Fluoride ☐ Other: _____

Part 3: Operations & Maintenance

Provide a description of how the PWS will operate, maintain, and monitor its POE/POU treatment devices to ensure continuous compliance with national primary drinking water regulations, MCLs, and treatment techniques. Attach any applicable documentation, if helpful to demonstrate the statements below.

Note:

- *This section should include information on regeneration and backwashing schedules, schedules for the replacement of spent media, spent cartridges, lost or spent resin, salt used for resin regeneration, exhausted membranes, particulate pre-filters, etc.*
- *This section should also describe when and where required records (such as testing records, maintenance log, etc.) will be maintained.*

Are the POE/POU treatment devices equipped with mechanical warnings (Performance Indicator Device, PID) to ensure that customers are automatically notified of recommended system maintenance and or operational problems?

☐ Yes

☐ No

If yes, explain what kind of mechanical warning the treatment devices have and how it works.

Describe what procedures have been or are being taken to ensure 100% customer participation in the POU/POE program (ensuring that all of the customers of the PWS have adequate access to potable water). Attach any applicable documentation, if helpful to demonstrate the statements below.

Describe how the water system will ensure that the minimum required rights and responsibilities, with respect to the POU/POE devices, are conveyed with the title upon the sale or transfer of each property. Attach any applicable documentation, if helpful to demonstrate the statements below.

The minimum rights and responsibilities that must be conveyed with the title are:

- The PWS owns and is responsible for monitoring and maintaining a POU/POE treatment device that is installed to meet the requirements of this Section;
- Persons served by the PWS must grant PWS employees reasonable access to POU/POE treatment devices, so that the devices can be properly maintained; and
- The PWS may discontinue water service to a customer who refuses to allow PWS employees to enter the customer's home or business to inspect, monitor and maintain POU/POE treatment devices.

I hereby certify that the information provided in this document is accurate and correct to the best of my knowledge.

Name and title: _____ Signature: _____

Date: _____

Example of maintenance log:

Date and Time of Service Call	Service Location	Services Provided	Service Provided by	Notes

APPENDIX 5

Sampling Plan Template



Sampling Plan

For use by Public Water Systems using Point-of-Entry / Point-of- Use Treatment Devices

Part 1: General Public Water System (PWS) Information				
Responsible Party:			Population Served:	
PWS Name:			PWS ID#: AZ04	
PWS Mailing Address:				
Contact Person:			Phone:	
Email Address:				
PWS Type (select one):			PWS Source	
Community Water System <input type="checkbox"/>			Types: Ground	
Non-Transient Non-Community Water System <input type="checkbox"/>			Water <input type="checkbox"/> Surface	
Transient Water System <input type="checkbox"/>			Water <input type="checkbox"/>	
Part 2: Monitoring Summary				
Nitrate: <input type="checkbox"/>	Arsenic: <input type="checkbox"/>	Fluoride: <input type="checkbox"/>	Radionuclides: <input type="checkbox"/>	Other: <input type="checkbox"/> Contaminant: _____
Projected Number of Point of Entry (POE)/Point of Use (POU) to be installed :				
<p><input type="checkbox"/> POE/POU(s) approved for Nitrate treatment are required to be sampled on an annual basis.</p> <p><input type="checkbox"/> POE/POU(s) approved for non-acute contaminants are required to be sampled every year with 1/3 of the devices sampled sent to a certified lab and the remaining 2/3 with test strips.</p> <p>*The PWS should maintain the device according to the manufacturer's recommendations</p> <p>*All samples must be sent to a certified lab with the results sent to ADEQ within 10 days after the monitoring period.</p>				
Part 3: Sampling locations for POU(s)/POE(s) including site map:				
Sample site ID:			Location:	
Sample site ID:			Location:	
Sample site ID:			Location:	
Sample site ID:			Location:	
Sample site ID:			Location:	
Sample site ID:			Location:	

APPENDIX 6

After applicants have received an *Approval to Construct* and have installed POE/POU devices, they are required to apply for an *Approval of Construction* (attached here) before they can begin operating the devices.



APPROVAL OF CONSTRUCTION POINT-OF-USE / POINT-OF-ENTRY WATER TREATMENT APPLICATION

GENERAL INFORMATION

1. Project Name (See instructions for naming criteria)

Project Name: _____ ADEQ File Number: _____

2. Applicant/Owner (Same as Approval to Construct)

(Check one) ☐ Owner ☐ Operator ☐ Contractor ☐ Other: _____

Name: _____

Title: _____ Firm Name: _____

Phone: _____ Email: _____

Mailing Address: _____ City: _____

State: _____ Zip: _____

3. Contact Person/Agent (Please fill out if different than the Applicant)

(Check all that apply) ☐ Engineer ☐ Contractor ☐ Other: _____

Name: _____

Title: _____ Firm Name: _____

Phone: _____ Email: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

4. Installation Information

Number of POU Units that were on approval to construct: _____

Number of POU installed with this certificate: _____

Number of potential POU Units to-be Installed in the Future: _____

If any service connections do not have POU/POE devices, explain the reason(s): _____

5. Certification of Initial Installation of POU/POE Treatment Devices (Same as item #2)

PWS Name: _____ PWS ID: _____

The Public Water System (PWS) named above hereby confirms that it has completed the installation of POE/POU treatment devices in accordance with the plan submitted to, and previously approved by, the Arizona Department of Environmental Quality. The PWS also certifies that it has achieved 100% compliance with its POE/POU program and has installed the appropriate treatment devices at all connections within the distribution area served by the system. Furthermore, the PWS understands that the results of compliance monitoring, as outlined in the approved plan, must be submitted to ADEQ on approved laboratory reporting forms within the appropriate time frames. Failure to submit these results will result in monitoring and reporting violations.

Signature: _____

Date: _____

APPENDIX 7

Attached here is *the Point of Use (POU)/Point of Entry (POE) Device Annual Update Form* that can be used to report the number of active POE/POU devices to ADEQ annually.



**Point of Use (POU) / Point of Entry (POE)
Device Annual Update Form**
For systems using POU and/or POE Devices
to comply with drinking water standards.

Part 1: General Public Water System (PWS) Information	
PWS Name:	PWS ID#: AZ04
Contact Person:	Phone:
Email Address:	
Reporting Year:	
Number of POE/POU Devices in service during Reporting Year:	

Please list all of the system's POE/POU devices. Mark the activity status and test method of each POE/POU for the Reporting Year. If there is not enough space in the table provided, please attach a list of the remaining POE/POU devices. Similar versions of this form will be accepted by ADEQ upon approval.

PART 2: POE/POU Sampling Information			
POE/POU#	Activity Status		Test Method (if active)
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips
	<input type="checkbox"/> Active	<input type="checkbox"/> Inactive	<input type="checkbox"/> Laboratory <input type="checkbox"/> Test Strips

☐ Additional POE/POU devices are attached to this report

I hereby certify that the information provided in this document is accurate and correct to the best of my knowledge.

Authorizer Name: _____ Signature: _____

Date: _____

Submit this form annually to your Compliance Assistance Coordinator prior to the beginning of the Reporting Year per A.A.C R18-4-218 (C)